

## ABSTRACT

A voltage control oscillator, outputting a clocking signal with a specific frequency according to an input voltage level, has a constant current source, a voltage/ current converter, a current mirror and an oscillating circuit. The constant current source provides a predetermined reference current. The voltage/ current converter is coupled to the constant current source, for determining a first current flowing through the voltage/ current converter according to the input voltage. The current mirror has a first current terminal coupled to the constant current source, for determining a third current flowing through a second current terminal according to the second current flowing through the first current terminal, wherein the second current is the reference current subtracted by the first current. The oscillating circuit is coupled to the second current terminal of the current mirror, for determining a frequency of the clocking signal according to the third current.